



THE

**JACG**

NEWSLETTER

**JACG**

THE JERSEY ATARI COMPUTER GROUP

\$2.00

VOLUME 8 NUMBER 4

BBS : 201-298-0161

JUNE 1988

### FROM THE EDITOR'S DESK

Please note the number of pages in this (the June) issue. The size of the NEWSLETTER was determined by three (3) factors:

- 1) Budgetary restraint
- 2) Contributions
- 3) Allowance for a larger JULY issue to contain all NEWSLETTER CONTEST submissions.

In line with the budget, I am trying another printer, and also will dispense with the heavy cover for a few months. Elimination of the standard inside back cover will allow for an additional page of content.

So far, one submission for the NEWSLETTER CONTEST has been received by the editor...will there be others?

RUMOR! I understand that one of our former presidents (now marketing non-ATARI computer products) will make a surprise showing at the ATARI SAFARI...does anyone remember what he looks like?

You will notice in our PRESIDENT'S column the sad news that Doug must leave office...per the by-laws and vote of the E-Board...Linda Peckham will take over on an interim basis when Doug's departure is official.

*J.B. Monte*

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### CALENDAR OF EVENTS

JUNE 20, 1988	Newsletter Contest Deadline
JULY 9, 1988	JACG Monthly Meeting
AUGUST 5, 1988	Exec Board Meeting

# ATARI®

# ST

# Computer System

68000 MICROPROCESSOR - 8 MHZ CLOCK - RS232 SERIAL PORT - PARALLEL PORT  
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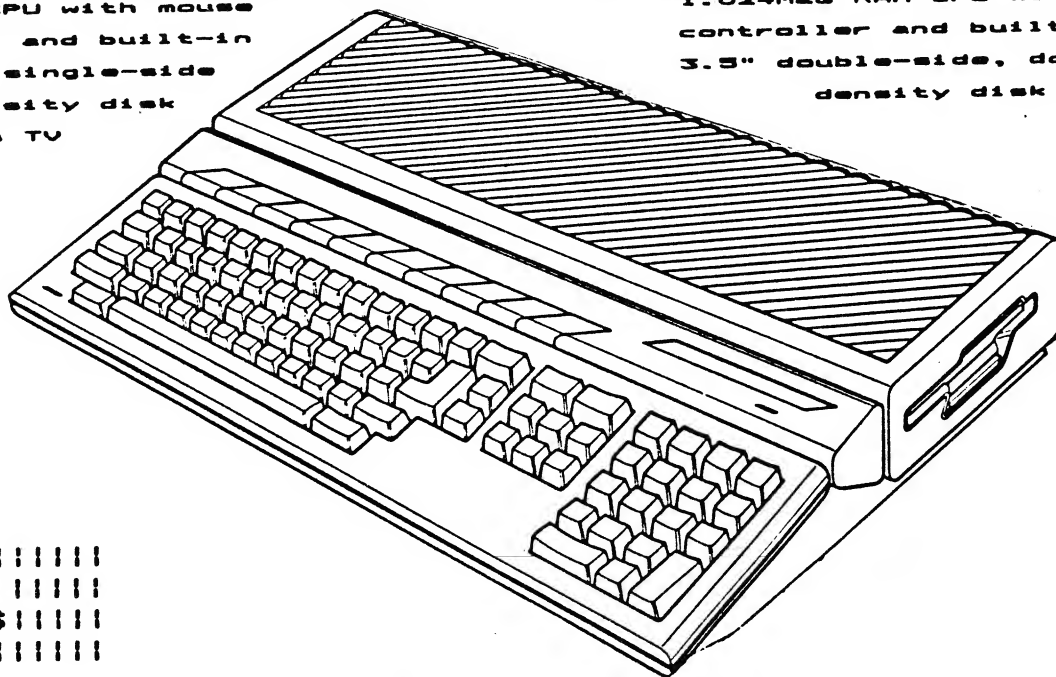
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## PRESIDENT'S REPORT

by Doug Van Hook

This month's President's report is especially difficult to write. On September 10th, I will begin a Saturday MBA Program at Fairleigh Dickinson University. This special program for Data Processing Professionals allows me to complete a 6 year program in a little over 2 years.

The decision to enter this program was a tough one because the club has always meant a lot to me. While absent from JACG meetings, I still plan to remain an active member.

I would like to point out that the HAYDEN Score Improvement System for the SAT was instrumental in the mathematical portion of the GMAT. Without my ATARI, I may not have even been admitted into Graduate School.

For those of you who wonder what it is like to be JACG president... It's an experience I wouldn't be the same without! I am grateful to have been able to work with such a capable group of executives. I used the word executives, because that's what they are! The individuals who manage this group deserve nothing but the highest praise for their commitment, and hard work.

Managing JACG is a Hands-On training experience for business managers of tomorrow. The often touted "Japanese" style of management is a requirement for working with a volunteer organization. I certainly got as much out of the job as I put into it.

### NEWSLETTER SUBMISSIONS

Submissions to the Newsletter should be in Atari writer or STWriter format, and uploaded to the Newsletter area of the BBS, or sent on a 5.25" disk to Dave Noyes. If you prefer to send Dave copy that is ready to be directly placed in the Newsletter, the copy should meet the following requirements: 0.5" left and right margins, two columns with a 0.5" central margin. The top and bottom margins should be 0.75 to 1.0". If you have an ST, and want to produce copy using Publishing Partner, then call Linda Peckham to obtain a copy of the Master Pages to be used.

## NOISE FROM NOYES

by Dave Noyes

On Writing For The

JACG NEWSLETTER

This month, for some reason (or for none...whatever), submissions for the NEWSLETTER were a bit on the "light" side. Of course, as a reduced printing bill is just what was needed...the timing was propitious. There will, however, be ample space in our JULY issue, for ALL submissions for the NEWSLETTER CONTEST. Thus, the subject for some noise this month!

I have tried hard the last two years, or so, to perpetuate the tradition of quality of content in the JACG NEWSLETTER, and hopefully, I have had some success in doing so. I request the following simple rules for ALL who submit articles in the future.

1) If supplying a file via our BBS, please use ATARIWRITER or ATARIWRITER PLUS (if 8-bit) or ST WRITER (if 16-bit).

2) If supplying "hard" copy...please look at this issue and provide double-struck condensed print (right-justified, we don't want to look ragged!) in a column width which will fit the two-column format that is commonly utilized by me. If using some type of desk-top publishing...triple column is OK...but please keep the font condensed.

These are the only two rules necessary. Why the fuss? Well, I simply want uniformity and ease. Uniformity in the appearance of the NEWSLETTER, and a little more ease in its preparation. In the future, I will not use copy which does not conform to these simple rules. If, for some reason a contributor feels that, for a particular article) some other convention is required...please check with me first (after all, I am not inflexible!).

-----  
DISK LIBRARY

PRICE CHANGE

Please be aware that the DRASTIC reduction in our JACG (8 and 16 Bit) library disks was just a wee bit (no pun intended) too drastic. Effective immediately please add one (\$1.00) dollar to all previously announced disk prices. I am sure that you will agree that the disks are an incredible bargain!!!

# A PHONE NUMBER PROGRAM FOR THE ATARI ST AND THE 800 BY ERIC JACOVES

Do you jot down new phone numbers on a scrap piece of paper only to lose it almost as soon as you put it down? If you do then I have a small program that just might help you out. But only if you do not lose the disk as soon as you put it down. The program is written in GFA Basic and a compiled version will be put into the JACG library for your use.... After you double click on the programs icon an alert box will appear on your screen. Just click On the go/on box and you will be asked if you are a first time user or perhaps you erased your data file by mistake or on purpose. If you answer YES (in capitals) the program will open up a new data base file for you. The data base name is always PHONENUM" and can be as large as the available space on your disk. An answer of NO or anything else will have the program ask you what you want to do. Your choices are ADD a new name, SEARCh the data base for a phone number, QUIt the program or WHAt are the names in your data base that you can search. You may use capital letters or lower case but use only the first three letters of each key word. If you choose the WHAt command then you have another choice to make. Your data base might be small and if so you can choose to list it on the screen, but if the data base is larger than one screen can hold it will scroll past at a rapid rate indeed and unless you are very quick you may miss the name that you are looking for. If this is the case then just send the data to your printer by choosing "P" instead of the screen command "S". In either case you will get the entire data base collection of searchable names. If you elect the ADD command the program will ask for the name to add and then the new phone number. The name and phone number will be added to the data base immediately so it could be searched for in the next command (hopefully you won't forget it so soon). The SEARCh command is probably the most useful, you enter the search name and the program will find the phone number and will print both on your screen. version 1 works on the ATARI ST and version 2 is for the 8 bit machine. The source code is presented here so

that you can see how it is done.

A few notes on how the atari 800 program works might help some of you beginning programmers with your own programs. Line 15 this dim statement sets up space for the five string variables used by the program. The trap at line 17 is a reset for the traps that prevent errors stopping the program when the loops through the data base reach end of file before the loop counter reaches its natural end at 500 tries. Lines 20 through 55 are needed to start the data base for the first time and the open statement at line 50 actually creates the empty data base for you. R\$ in line 80 contains the answer you give to the question in lines 60-70. only the first three letters are used. Lines 90,100 and 110 send the program to the three logic areas according to which function you have chosen, ie QUIting the program, asking for all the search strings in your data file, ADDing a new name set to the data base. The program assumes that you want to search the data base for a particular name if your answer is not one of ADD, QUI or WHA. The search name is put into S\$ and the data base is opened for input with the pointer at the top of the file in line 130. The loop at 135 to 143 reads through the data base and checks the value in S\$ to see if it matches the name in A\$. If it does then lines 160 and 161 print the name in A\$ and the data in P\$ that you are looking for. P\$ can contain up to 60 characters and can have more than just a telephone number. If you need more than 60 characters just change the 60 in the dim statemant to what ever you want. Do not make the search string too large (30 characters is already a little large) since you will have to type it in its entirety to start the search. If the search name is not found in the data base then you are sent back to line 60 and can start over. The data file is always closed after each activity since the next activity has to set the pointer to a different

place in the file.

Line 500 starts the sequence to add a new name to the data base and the file is opened for append at line 540(the pointer is at the end of the file). Lines 550 and 560 write the new name and data strings to the data base.

The what have I got in my data base command starts at line 1000 and opens the file for input at that line. You are asked to choose between getting the output on the screen or on your printer(you have one don't you???) This is because the file might be too large to follow as it rapidly scrolls past you if it exceeds one screen size. T\$ contains the answer of either a P for the printer or an S for the screen. Each record in the data base is read in in line 1040 and depending on the T\$ value the search string is printed to the screen or the printer..

To allow for having the program on one disk and the data base on another disk the program looks to disk 2 for the data base. This allows you to have several different data bases for different reasons or purposes. Since the name for the data base is always "PHONENUM" you need to keep them on separate disks. Should you be unfortunate and have only one disk drive then you will have to change the D2 value to D: in lines 50, 130, 540, and 1000.

I assume that Atari 800 series computers are always used in capital letter mode so the program does not check for lower case letters as does the ST version.

An important point to be sure of is when you key in the 8 bit program you must use a semicolon in lines 550 and 560 not a comma. This is to place the added data at column one in the data base. If you use a comma then the data will be tabbed over 10 spaces and you will not find it in a search command. That is a quirk in Atari 800 basic.

As you can see a program does not have to be complex to be useful so you might try your hand in coming up with an application and completing the exercise of actually putting the idea down in the basic language and putting it in this Newsletter.

At any rate try this program out and let me know if you like it or find it useful.

**FOR THE FIRST TIME A PROGRAM FOR**

**BOTH THE 8 BIT AND THE 16 BIT  
COMPUTERS TO PROVE THAT WE ARE  
TOGETHER IN THIS ATARI MOVEMENT  
THROUGH COMPUTERLAND...  
BE WELL AND PROSPER....**

**Eric Jacoves**

### ST-Report Official Contest Rules

No purchase necessary.

Deadline for consideration in this contest is midnight August 31, 1988.

Winners will be announced in ST-Report on September 12, 1988. We guarantee to award all prizes. The prize list will be announced during the contest.

All readers are eligible to enter except employees of APEInc. Publishing, CompuServe, GEnie, Delphi and their immediate families.

This contest void where prohibited or restricted by law. We are not responsible for lost, mis-marked, or delayed art/work.

All submissions must be drawn with any Atari ST drawing program.

All submissions must be drawn by the original artist.

Copyrighted art work will not be accepted.

All submissions become the property of APEInc.

All submissions must be uploaded to specified BBS systems by the deadline date. All systems have time and date stamping capability. Any entry dated after 8/31/88 will be void from the contest.

#### Art Work Requirements

All art work considered for this contest must be drawn with any Atari ST drawing program.

Any person submitting art work must leave an address, telephone number, and drawing program used.

Artwork must contain the following:

ST-REPORT

The winning entry will be used at a later date for a newsletter or magazine cover.

#### Where to Send

All art work may be uploaded to the following systems.

Syndicate BBS (201) 968-8148

Bounty ST BBS (904) 786-4176

Entries by mail are also permitted. Be sure to use a 3.5 floppy S/S! You may send to:

ST-Report Logo Contest

Post Office Box 74

Middlesex, New Jersey

08846-0074

(Please include your name, address and telephone number)



```

Rem ATARI ST VERSION
M$=" PHONE NUMBER PROGRAM; BY ERIC JACOVES"
Alert 1,M$,1,"GO ON",B
Print B
Print "FIRST TIME USER OR DID YOU DELETE YOUR DATA FILE??? ANS YES OR NO"
Input Yn$
If Yn$="YES" Then
    Open "O",#1,"PHONENUM"
    Close #1
Endif
Start:
Print " ADD SEARCH OR QUIT OR WHAT JUST THREE LETTERS OF YOUR CHOICE"
Input R$
If R$="QUI" Or R$="qui" Then
    Goto Fin
Endif
If R$="WHA" Or R$="wha" Then
    Open "I",#1,"PHONENUM"
    Print "TO THE SCREEN = S OR TO THE PRINTER = P, WHICH??"
    Input R$
    For I%=1 To 500
        Exit If Eof(#1)
        Input #1,A$
        Input #1,P$
        If R$="P" Then
            Lprint A$
        Else
            Print A$
        Endif
    Next I%
    Close #1
Endif
If R$="ADD" Or R$="add" Then
    Print "NAME TO ADD IS? "
    Input A$
    Print "PHONE NUMBER TO ADD IS?"
    Input P$
    Open "A",#1,"PHONENUM"
    Print #1,A$
    Print #1,P$
    Close #1
Endif
If R$="SEA" Or R$="sea" Then
    Print "ENTER THE SEARCH NAME"
    Input S$
    Open "I",#1,"PHONENUM"
    For I%=1 To 500
        Exit If Eof(#1)
        Input #1,A$
        Input #1,P$
        If S$=A$ Then
            Print
            Print A$,P$
        Endif
    Next I%
    Print
    Close #1
Endif
Goto Start
Fin:
End

```

#### Updates

This contest will update uploading areas every two weeks.  
Contest rules will not be changed, but judges may be added during the run of the contest.  
Current judge listing will be published next week.

This contest commences May 2, 1988 and will end Midnight August 31, 1988.

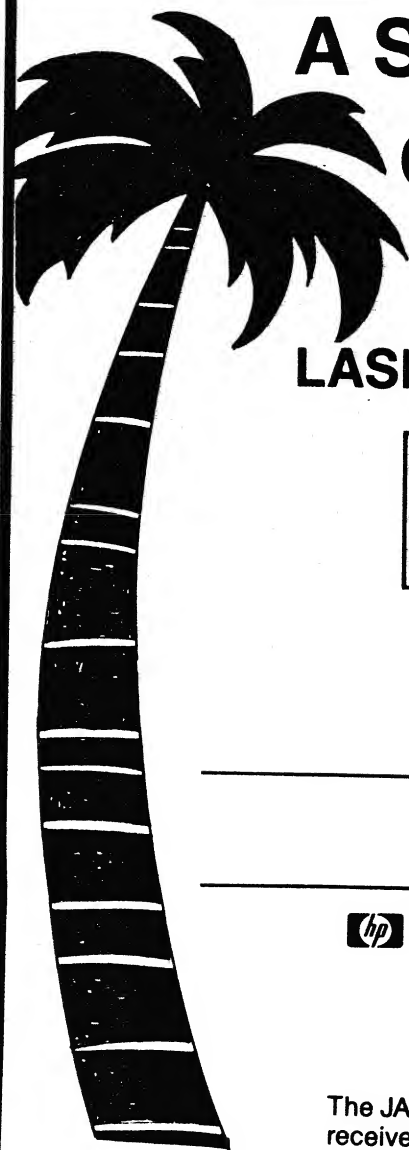
If you have any questions, Please leave email on the services at the following addresses:

CompuServe:71777,2140  
Genie:ST-REPORT:R.KOVACS  
DELPHI:RONKOVACS  
The Source:BDG793

#### Rules and Regulations:

- 1). Use any full color program written exclusively for the ST to draw your own personal design of an ST-Report logo.
- 2). Art work ported over from any other computer is void.
- 3). No X-rated art work will be accepted.
- 4). Winners will be announced by mail, email, phone call or equivalent on or before September 12, 1988.
- 5). Judges decisions are final.

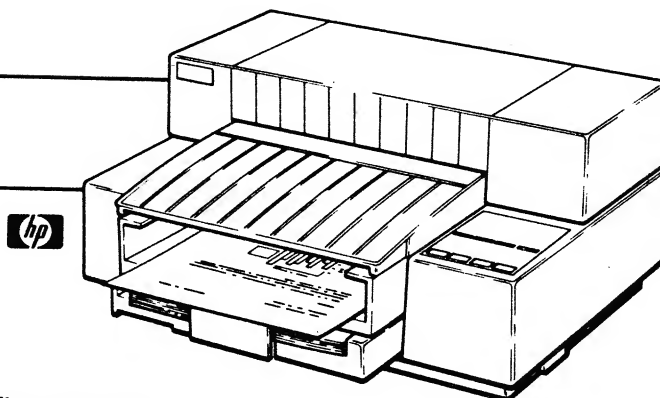
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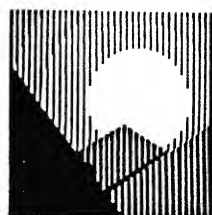
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```
5 REM ATARI 800 VERSION
10 REM PHONE NUMBER PROGRAM BY ERIC JACOVES
15 DIM A$(30),P$(60),R$(3),S$(30),T$(1)
17 TRAP 40000
20 ? "FIRST TIME USER?? ANSWER YES OR NO"
30 INPUT A$
40 IF A$="NO" THEN 60
50 OPEN #1,8,0,"D2:PHONENUM.DAT"
55 CLOSE #1
60 ? "ADD SEARCh OR QUIt OR WHAT "
70 ? "JUST THREE LETTERS OF YOUR CHOICE"
80 INPUT R$
90 IF R$="QUI" THEN 1500
100 IF R$="WHA" THEN 1000
110 IF R$="ADD" THEN 500
120 ? "ENTER THE SEARCH NAME"
125 INPUT S$
130 OPEN #1,4,0,"D2:PHONENUM.DAT"
132 TRAP 144
135 FOR I=1 TO 500
138 INPUT #1,A$
139 INPUT #1,P$
141 IF S$=A$ THEN 160
143 NEXT I
144 ? "NAME NOT FOUND TRY AGAIN":CLOSE #1:GOTO 60
160 ? A$
161 ? P$
163 CLOSE #1
164 GOTO 60
500 ? "NAME TO ADD IS"
510 INPUT A$
520 ? "PHONE NUMBER TO ADD IS "
530 INPUT P$
540 OPEN #1,9,0,"D2:PHONENUM.DAT"
550 PRINT #1;A$
560 PRINT #1;P$
570 CLOSE #1
580 GOTO 60
1000 OPEN #1,4,0,"D2:PHONENUM.DAT"
1010 ? "TO THE SCREEN =S OR THE PRINTER =P?"
1020 INPUT T$
1030 FOR I=1 TO 500
1040 INPUT #1,A$:INPUT #1,P$
1050 TRAP 1080
1060 IF T$="P" THEN LPRINT A$
1065 IF T$="S" THEN ? A$
1070 NEXT I
1080 CLOSE #1
1090 GOTO 60
1500 END
```

## NEWSLETTER CONTEST!

**Don't Forget to Enter!**

Win a \$25 gift certificate to Gemini's (or a club membership) for the best article printed in the July 1988 JACG Newsletter! The article should be one column (of the newsletter) in length. Submissions should be in AtariWriter or STWriter format, and can be uploaded to the BBS, or sent on a 5.25" disk to the Editor. Enter now-- the Deadline is June 20!



**HAVE A SAFE AND  
SANE HOLIDAY**



## LEARNING TO PROGRAM IN ATARI BASIC

### LESSON 2 Version 1.03

Variables, Reading data, Input, Math

(C) COPYRIGHT 1986 by Jackson Beebe

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#### CONTENTS:

NUMERIC variables  
STRING variables  
LET statement  
Math rules  
INPUT statement  
READ statement  
DATA statement  
RESTORE statement  
END statement

This is Lesson 2 of Learning to program in Atari BASIC, brought to you by Jackson Beebe. Contact me at the address at the end of the lesson.

#### FEEDBACK:

Since Lesson 1, I have received inquiries about what Disk Operating System (DOS) I am using. I am writing for Atari DOS 2.0s/2.5, as everyone with an Atari has, or has access to this DOS. Other DOS's allow variable names beginning with #'s, and other features. More discussion of DOS in later lessons.

#### VARIABLES:

Two common ways of using numbers in programs, are to use them as CONSTANTS, or in VARIABLES. When you simply use a number like 3, that's a CONSTANT, because it's just and always 3. It doesn't change.

VARIABLES can hold different numbers or letters at

different times in a program. For example, a payroll program, could use the variables EMPLOYEE\$, RATE, HOURS, and SALARY. These would hold new data each time they calculated an employee's salary.

There are two kinds of variables.

#### 1. Numeric Variables (numbers)

#### 2. String Variables (letters)

Numeric variable names must start with a letter, and may contain up to eight uppercase letters or numbers (alphanumeric data.) No spaces are allowed. As a general rule, you should keep variable names short, but use names that suggest what they do. For example to set up a numeric variable to hold Fahrenheit temperature in a conversion program, you could call it FAHREN, FTEMP, F, etc.

String variables hold letters, or words, sentences, etc. They must begin with a letter, and end in a dollar sign, as NAME\$.

A quirk of Atari BASIC requires that string variables be dimensioned before use. This is done with the DIM statement followed by the variable name, and the maximum length the computer should reserve storage for.

For example:

```
10 DIM NAME$(20)
```

This reserves storage for a name of up to 20 characters in length. If you typed 25 letters for input, it would only read 20.

If you forget, you'll get an error message when you try and use a string variable you haven't dimensioned. More than one variable may be dimensioned by separating variable names with commas.

For example:

```
10 DIM ADDR$(20),CITY$(20),STATE$(2)
```

#### LET STATEMENT:

The LET statement, assigns something to a variable. It could set X = 0, or NAME\$ = Jack. The official form of the LET statement goes like this:

```
10 LET X=0  
20 LET NUMBER=1024  
30 LET TOTAL=NUMBER  
40 DIM NAME$(25)  
50 LET NAME$="George Washington"  
etc
```

The way this ASSIGNMENT statement works, is that it looks for a variable name on the left of the equals sign. It will take what's on THE RIGHT, and put it into the variable on THE LEFT. Got that? It loads from the right, into the left.

```
10 X=256 (sets X equal to 256)

20 25 = SUM (** WON'T WORK **)

20 SUM = 25 (this is correct)

30 SUM = X (now SUM = 256)
```

It happens that you don't need to put the word LET in there for it to work (how handy), and in fact it is nearly poor practice to do so. The 'hip' way to do it is:

```
10 X=0
20 NUMBER=1024
30 TOTAL=NUMBER
40 DIM NAMES$(25)
50 NAMES$="George Washington"
```

We will use LET statements in EVERY program we write, but outside this lesson, probably never use the word LET again! Interesting tidbit. We'll see more examples as we progress.

Note that spaces between variables, the equal sign, and constants, in the LET statement are optional. Atari BASIC is loose about this. Spread it out if it looks more readable to you, or eliminate spaces when you're running out of room in a 100+ character line.

BASIC already has RESERVED WORDS that cannot be chosen for variable names. For instance, PRINT, STOP, END, SIN, COS, TAN, RND, INT, and others cannot be used for your variable names, as the computer already uses those words to call built-in functions. Remember to check for this in programs you just can't seem to de-bug.

#### MATH RULES:

Once we get numbers into a program with LET statements, we can do math on the numbers. Here's the Atari BASIC guide to math symbols:

- + = addition
- = subtraction
- \* = multiplication
- / = division
- ^ = raised to a power

For example:

```
10 REM * MATH DEMO *
20 REM put numbers into variables
30 A=2:B=5
40 REM print examples
50 ? A+B
60 ? A-B
70 ? A*B
80 ? A/B
90 ? A^B
100 END
```

Type this program in and try it. This should print out answers. Note line 30's use of multiple statements on the same line, separated by colons. The question mark (?) is Atari shorthand for PRINT. This saves a lot of typing. These are examples of doing math in the PRINT statement. This is not only allowed, but is usually the preferred way of printing out math results, as opposed to using one statement to do the math, and another to print the result. You have to tell computers to PRINT in order to see anything. You could say:

```
10 A=1:B=3:C=4
20 ANS=A*B*C
30 END
```

This WILL multiply 1 times 3 times 4, and will put the answer 12 in the variable ANS, but you won't see it, unless you ask to PRINT it. Adding:

```
25 ? ANS
```

would print out 12.

Math is performed in the order:

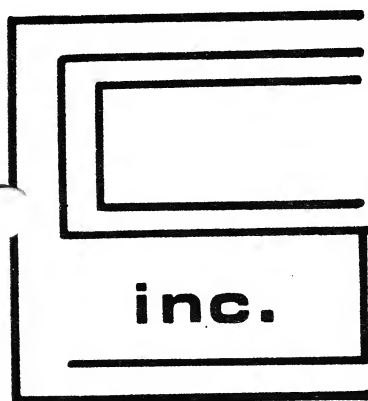
- 1st Anything in parenthesis.
- 2nd Exponentiation (# to a power)
- 3rd Division or Multiplication
- 4th Addition or subtraction

Some examples.

```
3+(4+6)*2 = 23      2^3 = 8
3+4+6*2    = 19      3+2^3*2 = 19
(3+4+6)*2 = 26      3+6/2+4*2 = 14
```

When in doubt, use parenthesis. It never hurts to put them in there. Always count the left and right parens, to make sure you've used an equal number of each.

Continued Next Month



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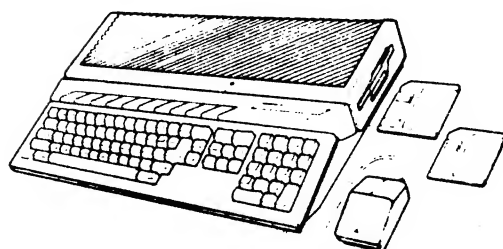
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